

management in primary care.

**Methods:** A qualitative approach was employed using semi-structured focus groups. Two focus groups were conducted with clinical pharmacists in general practice, and three with non-physician primary care professionals in Region Uppsala, Sweden, during May–June 2022. Discussion topics covered chronic pain treatment, opioid management, non-pharmacological alternatives, and interprofessional collaboration. All interviews were audio-recorded, transcribed verbatim, and analysed thematically.

**Findings:** Five focus groups included seven clinical pharmacists, five physiotherapists, two nurses, two psychologists, and one dietician. Thematic analysis revealed five key themes: (1) the psychological and quality-of-life impact of chronic pain; (2) the complexity and general undesirability of opioid treatment for chronic pain; (3) insufficient access to or barriers against non-pharmacological alternatives; (4) the benefits of interprofessional care, particularly incorporating pharmacists' expertise; and (5) prerequisites for successful treatment, including clear care plans, consistency among physicians, and dedicated resources.

**Conclusion:** Clinical pharmacists and other non-physician healthcare professionals recognize the complexity of the management of chronic non-cancer pain, favoring non-pharmacological care over long-term opioid use. Future initiatives to improve primary care should focus on supporting interprofessional collaboration, a critical factor in enhancing the management of chronic pain.

<https://doi.org/10.1016/j.sapharm.2025.02.063>

### An interview study with caregiving family members on challenges on hospital discharge and opportunities for community pharmacies

Viktoria S. Wurmbach<sup>1,\*</sup>, Emilia Picker<sup>1</sup>, Frank Alf<sup>2</sup>, Reinhold Wolke<sup>2</sup>, Hanna M. Seidling<sup>1</sup>

<sup>1</sup> Heidelberg University, Medical Faculty Heidelberg / Heidelberg University Hospital, Medical Clinic, Internal Medicine IX –Department of Clinical Pharmacology and Pharmacoepidemiology, Cooperation Unit Clinical Pharmacy; <sup>2</sup> University of Applied Sciences Esslingen, Faculty Social Work, Education and Nursing

\* Corresponding author:

E-mail address: [viktoria.wurmbach@med.uni-heidelberg.de](mailto:viktoria.wurmbach@med.uni-heidelberg.de) (V.S. Wurmbach).

**Background:** In Germany, at least 3 Million family members are estimated to support patients in medication management. Taking on these tasks, often without receiving any medication-related education or training, can be challenging for caregiving family members, overburden them and potentially lead to medication errors.

**Purpose:** As part of the CAPAA project, caregivers were interviewed with the aim to analyse the problems they experience in long-term care but also especially after hospital discharge of the family member they care for and to identify the potential for community pharmacies to support medication management.

**Method/Study Design:** A preceding focus group discussion was held in order to develop the topic guide for the semi-structured interviews, that covered the caregivers' experiences with the medication-related care after a hospital discharge of the patient as well as in long-term care and their collaboration with community pharmacies. The interviews were conducted face-to-face, audio-recorded, transcribed verbatim and analysed using qualitative content analysis in MAXQDA 24. All problems but also support measures identified were mapped to the different stages of the medication process, i.e. prescription, information, dispensation, administration, monitoring and communication.

**Findings:** A total of six caregivers were interviewed (62.6 ± 6.5 years old, 83.3 % female). Caregivers reported various problems throughout the medication process. The gap in information was a challenge both after hospital discharge as well as in long-term care. Often this was due to limited knowledge, but also due to poor communication with the hospital or general practices. Furthermore, medication management required organisational effort, which was considered time-consuming. Home-delivery of medication, together with easy accessibility and pharmaceutical competences, made the community pharmacy an important resource for caregivers. However, some participants were unaware of which further support community pharmacies may offer, such as pharmaceutical services, and therefore did not proactively ask for this so far.

**Conclusion:** The interviews showed that the caregivers experience various problems. Community pharmacies are perceived as supportive even though not all potential services a community pharmacy might offer were requested by the caregivers so far. As part of the CAPAA project, additional interviews are

conducted with professional caregivers of home care services, pharmacists and patients which will make it possible to analyse the best way to collaborate with all stakeholders.

<https://doi.org/10.1016/j.sapharm.2025.02.061>

### Medication Adherence and Quality of Life Characterization in a Sample of Low-income Seniors from the Inner Center of Portugal

Carla Perpetuo<sup>1</sup>, Ana Isabel Plácido<sup>2</sup>, Fátima Roque<sup>2,\*</sup>, Maria Teresa Herdeiro<sup>3</sup>, Ramona Mateos-Campos<sup>4</sup>

<sup>1</sup> Local Health Unit of Guarda; <sup>2</sup> Biotechnology Research, Innovation and Design for Health Products (BRIDGES) - Research Laboratory on Epidemiology and Population Health, Polytechnic of Guarda (IPG); <sup>3</sup> Biotechnology Research, Innovation and Design for Health Products (BRIDGES) - Research Laboratory on Epidemiology and Population Health, Polytechnic of Guarda (IPG); <sup>4</sup> Institute of Biomedicine, University of Aveiro (iBIMED-UBI); <sup>5</sup> Preventive Medicine and Public Health, Department of Biomedical and Diagnostic Sciences, University of Salamanca

\* Corresponding author:

E-mail address: [froque@ipg.pt](mailto:froque@ipg.pt) (F. Roque).

**Background:** Low-income seniors face financial challenges that can influence their healthcare access, quality of life, and medicine use. Medication Adherence in this population is often low and can impact seniors' quality of life.

**Purpose:** Access medication adherence and quality of life in a sample of low-income seniors from the inner center of Portugal.

**Method:** A questionnaire was applied to a convenience sample of older adults from the inner center of Portugal. The questionnaire included the Measure of Adherence to Treatment scale (MAT) and the European Quality of Life-5 Dimensions 5 Response Levels from EuroQol (EQ-5D-5L), both translated and validated for Portugal. The study obtained ethics approval and the participants gave their informed consent to participate in the study.

**Findings:** Of the 103 participants, 63.1% were female, and 70.9 % were between 65 and 74 years old. In terms of education, 75.7% had only completed primary school.

In terms of medication use, we found that 72.8% of older adults take five or more medicines per day. Almost 50% of participants had adherence values below the median (5.42), and 37.9% reported that sometimes forgot to take their medication. The application of the EQ-5D-5L questionnaire revealed the following results regarding walking problems: 35% of participants experienced moderate difficulties, while 24.3% reported no walking issues at all, and 22% faced severe walking problems. Regarding personal care, the majority (62.1%) had no problems washing or dressing themselves. In terms of carrying out their usual activities, 48.5% reported no problems, 20.4% had slight problems, and a further 20.4% had moderate problems. Regarding pain or discomfort, 35.9% reported having moderate pain or discomfort, 23.3% mild, and 22.3% severe, only 17.5 % reported having no pain or discomfort at all. Concerning anxiety or depression, 38.8% of participants reported feeling neither anxious nor depressed, while 27% indicated they felt moderately anxious or depressed. The EQ-VAS scores showed that 65% of older adults rated their health as at 50% or worse, and only a small number of individuals reported the best possible quality of life.

**Conclusion:** A large percentage of participants had low medication adherence and a poor quality of life. This highlights the urgent need for effective interventions to enhance treatment adherence and subsequently improve the quality of life for low-income seniors.

<https://doi.org/10.1016/j.sapharm.2025.02.062>

### Exploring health professionals' engagement during identification and management of pain in people living with dementia: how pharmacists compare?

Driton Shabani<sup>1,\*</sup>, Berat Fazliu<sup>1</sup>, Kreshnik Hoti<sup>1</sup>

<sup>1</sup> University of Prishtina, Division of Pharmacy, Department of Pharmacy Practice and Pharmaceutical Care

\* Corresponding author:

E-mail address: [driton.shabani@uni-pr.edu](mailto:driton.shabani@uni-pr.edu) (D. Shabani).

**Background:** Pain assessment and management in people living with dementia (PLWD) is challenging due to their compromised ability to reliably self-report, especially in advanced stages of dementia. Literature data on how pharmacists compare to different health professionals in regards to identification and management of pain in this population group is limited.

**Purpose:** Identify differences and areas of consideration for different health professionals, with focus on pharmacists, during identification and management of pain in PLWD.

**Methods:** We conducted semi-structured interviews with physicians, pharmacists, nurses and physiotherapists which in their daily practice engage with management of PLWD. These health professionals practiced in hospital, family medicine centers and pharmacies in various locations around Kosovo. Various literature data reporting challenges of pain management in PLWD was used to construct the interview guide which contained a number of open and closed ended questions focused around care of people living with dementia and management of their pain. Before finalizing the interview guide, it was first piloted with target health professionals to ensure content and face validity. We transcribed data collected verbatim and then thematically analyzed it using a grounded theory approach. Interviewing of health professionals was conducted until thematic saturation was achieved.

**Findings:** A total of 25 health professionals of which 11 physicians of different specialties, 5 pharmacists, 5 nurses and 4 physiotherapists. There were 7 main themes that emerged from semi-structured interviews. These themes were related to a) challenges to pain identification, b) concern about the presence of pain in PLWD, d) family member engagement e) use of analgesics and psychotropic medications f) lack of using pain assessment instruments, g) training needs of health professionals and h) collaboration between health professionals. Specific differences in how health professionals engage during management of pain in PLWD were also identified. Most health professionals did not use a specific observational pain assessment instrument to identify pain and reported that their use would facilitate this. Pharmacists reported a low level of direct engagement with the management of PLWD and this was mainly based on interaction with family members and indirectly through medical summaries provided by physicians.

**Conclusions:** Unlike physicians, nurses and physiotherapists, pharmacists were not directly involved in identification and management of pain in PLWD. Considering the increasing prevalence of dementia, this is an area that pharmacists need to further explore in order to consolidate their role during provision of pharmaceutical care for PLWD.

<https://doi.org/10.1016/j.sapharm.2025.02.063>

### Non-Biological Medication Burden in IBD Patients - Insights at the Onset of Adalimumab Therapy

Milica Culafic<sup>1,\*</sup>, Milena Kovacevic<sup>1,\*\*</sup>, Vanja Lazarevic<sup>1</sup>, Sandra Vezmar Kovacevic<sup>1</sup>, Branislava Miljkovic<sup>1</sup>, Srdjan Markovic<sup>2,3</sup>, Petar Svorcan<sup>2,3</sup>, Katarina Vucicevic<sup>4</sup>

<sup>1</sup> Department of Pharmacokinetics and Clinical Pharmacy, Faculty of Pharmacy –University of Belgrade, Belgrade, Republic of Serbia; <sup>2</sup> University Hospital Medical Centre "Zvezdara", Gastroenterology and Hepatology Department, Belgrade, Republic of Serbia; <sup>3</sup> Faculty of Medicine - University of Belgrade, Republic of Serbia; <sup>4</sup> Department of Pharmacokinetics and Clinical Pharmacy, Faculty of Pharmacy –University of Belgrade, Belgrade, Republic of Serbia

\* Corresponding author:

\*\* Corresponding author:

E-mail addresses: [mculafic@pharmacy.bg.ac.rs](mailto:mculafic@pharmacy.bg.ac.rs) (M. Culafic), [milena.kovacevic@pharmacy.bg.ac.rs](mailto:milena.kovacevic@pharmacy.bg.ac.rs) (M. Kovacevic).

**Background:** Inflammatory bowel disease (IBD) often requires biologic therapy, with adalimumab (ADA) being an effective option for moderate to severe cases. Despite advancements, gender-specific differences in IBD management persist, influencing pharmacotherapy and patient care. Understanding medication burden at ADA initiation among patients based on clinical remission status is essential.

**Purpose:** This study aimed to evaluate the use of non-biological GI medications in IBD patients at ADA initiation, focusing on gender differences, clinical remission status, and diagnosis-specific patterns to support personalised treatment strategies.

**Method/Study Design:** A retrospective study was conducted on IBD patients receiving ADA. Data were analysed using SPSS Statistics (v28). Descriptive data were compared using Chi-Square and Mann-Whitney U tests to identify significant gender, clinical remission, and diagnosis-related differences in non-biological medication use and dosage. The number of non-biological GI medications and daily doses per patient were recorded.

**Findings:** The study included 83 IBD patients (mean age 37.98, SD 11.68), predominantly with Crohn's disease (89.6%), with 55.2% being female. The mean total number of non-biological GI medications was 1.99 (SD 1.45; range 0–6), with an average daily dose of 3.48 (SD 2.97; range 0–12.75). Males had a significantly higher number of daily doses compared to females ( $p = 0.012$ ), while the total number of non-biological GI medications was higher in males but not significantly different between genders. No significant differences were noted between Crohn's disease and ulcerative colitis patients regarding daily doses ( $p = 0.288$ ) or total medications ( $p = 0.059$ ). Commonly prescribed non-biological GI drugs included azathioprine (44.8%), prednisone (29.2%), pantoprazole (27.1%), methotrexate (26%), metronidazole (18.8%), mesalazine tablets (14.6%), and probiotics (12.5%). Patients in clinical remission at ADA initiation had fewer daily doses and total non-biological GI medications than those not in remission ( $p = 0.008$  and  $p = 0.009$ ). Patients with perianal disease had a higher number of GI non-biological drugs ( $p = 0.006$ ), while no significant difference was seen in patients with extraintestinal manifestations ( $p = 0.403$ ).

**Conclusion:** This study highlights significant gender differences in the daily dose burden of non-biological GI medications among IBD patients treated with ADA, with males showing a higher burden. This may reflect more severe complications in males needing intensive treatment. Patients in clinical remission had fewer daily doses and total GI medications. The link between increased medication use and perianal disease underscores treatment complexity. Future research should explore these disparities and guide personalised treatment strategies.

<https://doi.org/10.1016/j.sapharm.2025.02.064>

### Engaging patients with self-reported adherence questionnaire in community pharmacy –Comparison of a pro-active position versus usual practice in Slovakia and Austria

Patricia Schnorrerova<sup>1,\*</sup>, Vanessa Schnorrerova<sup>2</sup>, Isabelle Arnet<sup>3</sup>

<sup>1</sup> Faculty of medicine, Comenius University in Bratislava, Slovakia; <sup>2</sup> Faculty of pharmacy, Comenius University, Bratislava, Slovakia; <sup>3</sup> Pharmaceutical Care Research Group, University of Basel, Switzerland

\* Corresponding author:

E-mail address: [schnorrerova@gmail.com](mailto:schnorrerova@gmail.com) (P. Schnorrerova).

**Background:** The 15-STARs is a short, self-report questionnaire that assesses determinants of current medication non-adherence behaviors from 3 categories (practical difficulties, reasons and missed doses). It has been validated and translated in several languages including Slovak and German. It has not yet been used in practice. Especially, it is still unclear how patients and pharmacists can fully benefit from it.

**Purpose:** To investigate how pharmacists interact with patients to get a successful completion of the 15-STARs questionnaire in community pharmacy.

**Methods:** This is an exploratory study. We recruited 100 patients with cardiovascular diagnoses and polypharmacy in 1 pharmacy in Bratislava, Slovakia, and 6 pharmacies in Vienna, Austria (50 per country) between January and June 2024. Patients agreed to complete the 15-STARs as part of the encounter. The Slovak pharmacist adopted a pro-active position that consisted in encouraging patients to "tell the truth without fear", emphasizing that there is no right or wrong answer. At least one crossed item indicating adherence difficulty qualified for non-adherence. Percentages were calculated.

**Findings:** Non-adherence was more often mentioned by Slovak patients compared to Austrian (76% vs 66%) with less Slovak patients claiming perfect adherence by skipping the entire block of six reasons items (54% vs 64%). When discussing the results with the pro-active Slovak pharmacist, patients reflected on their behaviors and most of them adapted their answers. Especially, many patients believed that forgetting their medicine once or twice a week (item 13), particularly during weekends, was not an issue.

**Conclusion:** The 15-STARs is easily accepted by patients. Indicating adherence may be due to social desirability and misconception of the patient's own behavior. A pro-active way of discussing the answers with patients enables to